

Listing of the Claims:

The following is a complete listing of all the claims in the application, with an indication of the status of each:

1. (Original) A method of producing a carbon nanotube, comprising: preparing a carbon nanotube by introducing a catalyst substance into a carbon structure; making the catalyst substance move in the carbon structure; and crystallizing the trail region.
2. (Original) The method of producing a carbon nanotube according to claim 1, wherein said crystallizing said carbon structure is performed after said carbon structure is fixed on a predetermined position of said substrate.
3. (Previously presented) The method of producing a carbon nanotube according to claim 1, wherein said carbon structure is heated when said catalyst substance is moved in said carbon structure.
4. (Original) The method of producing a carbon nanotube according to claim 3, wherein at least a part of said catalyst substance is liquefied by heating said carbon structure.
5. (Previously presented) The method of producing a carbon nanotube according to claim 1, wherein said carbon structure is formed by a vapor-phase deposition method of using a charged particle beam as excitation source.
6. (Previously presented) The method of producing a carbon nanotube according to claim 1, wherein said carbon structure is prepared by a vapor-phase deposition method of using an aromatic hydrocarbon compound as precursor material.
7. (Previously presented) The method of producing a carbon nanotube according to claim 1, wherein said carbon structure is a resist pattern.
8. (Previously presented) The method of producing a carbon nanotube according

to claim 1, wherein said carbon structure is a linear structure and said catalyst substance is moved along said carbon structure.

9. (Previously presented) The method of producing a carbon nanotube according to claim 8, wherein said catalyst substance is a catalyst particle and the diameter of said catalyst particle is 0.5 to 3 times as large as the diameter of said linear structure.

10. (Original) A method of producing a carbon nanotube, comprising: preparing a substrate; forming a carbon structure at a position separated from the surface of the substrate; preparing a carbon nanotube by making the catalyst substance move in the carbon structure; and crystallizing the trail region.

11. (Original) The method of producing a carbon nanotube according to claim 10, wherein said carbon structure is heated when said catalyst substance is moved in the carbon structure.

12. (Original) The method of producing a carbon nanotube according to claim 11, wherein at least part of said catalyst substance is liquefied by heating said carbon structure.

13. (Previously presented) The method of producing a carbon nanotube according to claim 10, wherein said carbon structure is formed by a vapor-phase deposition method of using a charged particle beam as excitation source.

14. (Previously presented) The method of producing a carbon nanotube according to claim 10, wherein said carbon structure is prepared by a vapor-phase deposition method of using an aromatic hydrocarbon compound as precursor material.

15. (Previously presented) The method of producing a carbon nanotube according to claim 10, wherein said carbon structure is a resist pattern.

16. (Previously presented) A method of producing a transistor, comprising

forming a source electrode and a drain electrode on both ends of the carbon nanotube structure, respectively, and additionally a gate electrode after forming a carbon nanotube structure by the method according to claim 1.

17. (Previously presented) A method of producing a wiring structure of carbon nanotube, comprising forming a carbon nanotube structure by the method according to claim 1.

18. (Currently amended) A nanotube structure product produced by the process of claim 1, said nanotube structure product comprising a substrate and a carbon nanotube placed above said substrate, wherein the entire of said carbon nanotube is separated from said substrate.

19. (Currently amended) A carbon nanotube structure product produced by the process of claim 1, said nanotube structure product comprising: a substrate; a first carbon dot and a second carbon dot formed on said substrate; and a carbon nanotube connecting the gap between said first and second carbon dots.

20. (Currently amended) The carbon nanotube structure product according to claim 19, wherein said first or second carbon dot contains an aromatic hydrocarbon.

21 (Currently amended). The carbon nanotube structure product according to claim 19, wherein said carbon nanotube is formed so that it is separated from said substrate.

22. (Currently amended) A transistor produced according to the process of claim 1, comprising a substrate and a carbon nanotube placed above said substrate, wherein the entire of said carbon nanotube is separated from said substrate the carbon nanotube structure according to claim 18.

23. (Currently amended) A wiring structure produced according to the process of claim 1, comprising a substrate and a carbon nanotube placed above said substrate.

wherein the entire of said carbon nanotube is separated from said substrate the
carbon nanotube structure according to claim 18.